Remarks

1. Summary of the Office Action

In the office action mailed October 1, 2007, the Examiner rejected claims 1-12 35 U.S.C. § 112 ¶ 2 as allegedly being indefinite. The Examiner objected to the drawings under 37 C.F.R. § 1.83(a) for allegedly not showing every feature of the invention specified in claim 9.

2. Status of the Claims

Claims 1-8 are currently pending. Claims 9-12 have been cancelled. Of the pending claims, claims 1 and 5 are independent, and the remaining claims are dependent.

Applicant has amended claim 1 to recite a method for estimating the latency of aperiodic tasks in a system with simultaneous scheduling of aperiodic messages and periodic transmissions on a common bus. The system comprises the steps of (a) using predefined periodic transmission times, calculating data transition points between periodic and aperiodic message transmissions intervals for a hyperperiod of interest in said system, (b) using said data transition points to produce a series of aperiodic latency estimation inflection points, (c) collecting data points of aperiodic message transmissions for hyperperiod of interest in said system, and (d) estimating the aperiodic latency probability at an inflection point in the hyperperiod of interest as being equal to the number of sample data points less than or equal to the said inflection point divided by the total number of collected aperiodic latency sample data points, said data points forming a data point plat that is assumed to be linear between said aperiodic latency inflection paints.

Amended independent claim 5 recites an improvement in a method for estimating the latency of aperiodic tasks in a system with simultaneous scheduling of aperiodic messages and periodic transmissions on a common bus, wherein predefined periodic transmission times are used to calculate data transition points between periodic and aperiodic message transmissions intervals for a

hyperperiod of interest in said system, data points of aperiodic message transmissions for the hyperperiod of interest in said system are collected and the aperiodic latency probability at an inflection point in the hyperperiod of interest is estimated as being equal to the number of sample data points less than or equal to the said inflection point divided by the total number of collected aperiodic latency sample data points, said data points forming a data point plot that is assumed to be linear between said aperiodic latency inflection points. The improvement comprises using said data transition points to produce a series of aperiodic latency estimation inflection points.

3. Response to Objections to the Drawings

As noted above, the Examiner objected to the drawings under 37 C.F.R. § 1.83(a) for failing to show every feature specified in claim 9. Without addressing the merits of the Examiner's objection (which Applicant disputes), Applicant has cancelled claims 9-12. Therefore, the Examiner's objections to the drawings are moot.

4. Response to Rejections under 35 U.S.C. § 112 ¶ 2

The Examiner rejected independent claims 1 and 5 because some limitations allegedly lacked antecedent basis. Specifically, the Examiner alleged that the limitation "said system" in claims 1 and 5 lack antecedent basis. Although Applicant disputes that this limitation lacks antecedent basis, Applicant has amended claims 1 and 5 to recite "a system." Consequently, all subsequent uses of "said system" in claims 1 and 5 (and in the claims depending from claims 1 and 5) have antecedent basis.

The Examiner also rejected independent claims 1 and 5 because the limitation "said hyperperiod" lacks antecedent basis. Applicant disputes that this term lacks antecedent basis, but nevertheless has amended claims 1 and 5 to recite "a hyperperiod of interest." Consequently,

subsequent uses of the limitation "hyperperiod of interest" in claims 1 and 5 (and all claims depending from claims 1 and 5) have antecedent basis.

Applicant submits that the pending claims are allowable. Applicant respectfully requests that the Examiner withdraw the rejection of the pending claims. Thus, Applicant respectfully requests favorable reconsideration and allowance of all of the claims.

The Examiner is invited to call the undersigned at (312) 935-2352 with any questions or comments.

Respectfully submitted,

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Date: December 28, 2007

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